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ABSTRACT

Appendixes to a study of the effectiveness of Peace Corps volunteers in agriculture who are AB generalists (individuals with a bachelor of arts degree in English, liberal arts, or social science) are contained in this document. Section 1 contains a glossary of terms used in the study. Section 2 describes the study's methodology and includes the instruments used (project summary sheet, management unit analysis sheet, interview summary sheet, and questionnaire). Section 3, Data Sources, contains comparative completion data, costs, project analysis and issues, and questionnaire analysis. (TA)

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ED136010

ABGs IN AGRICULTURE

VOLUME TWO

APPENDICES

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ACTION EVALUATION

CE 010 047

DECEMBER 1975

TABLE OF CONTENTS

I Glossary of Terms

II Methodology
- A. Description
- B. Instruments
  1. Project Summary Sheet
  2. Management Unit Analysis Sheet
  3. Interview Summary Sheet
  4. Questionnaire

III Data Sources
- A. Completion
- B. Costs
- C. Project Analysis
  1. Issues
- D. Questionnaire Analysis

APPENDIX I

GLOSSARY OF TERMS

GLOSSARY OF TERMS*

ABG The AB Generalist is a person who possesses a bachelor's degree in liberal arts or a social science.

Active Completion Rate See Completion Rate.

Ag Background Persons who have had at least two years experience in farming, forestry or fisheries with or without a college degree.

Ag Degree The holder of a bachelor or graduate degree in agriculture, fisheries or forestry.

Agriculture Used in the broad sense of farming, i.e. production of plants and animals.

Agriculturalists Persons who possess a degree or have experience in agriculture.

Business Administration Persons with an accounting, economics and business administration degrees or experience working in agricultural projects.

Completion Rate The percentage of trainees or volunteers who complete training or service. Time adjusted completion rate, percentage of time served over time elapsed. Man-month completion rate, the average number of months completed in a twenty-four month tour. Active completion rate, the number of volunteers on board at a particular time.

Control Group A sample or grouping that affords a standard of comparison or means of verification.

Cost-Effectiveness A quantitative expression of results in terms of expenditures. Derived by dividing the sum of the recruitment and training costs adjusted for training attrition and the average cost of the return fare to the United States by the expected months of service and adding the average monthly volunteer support costs.

Early Termination A trainee or volunteer who does not complete his/her tour of service.

Fill Rate The number of trainee starts divided by the number of requests for trainees.

Generalists Persons who do not possess specialized skills; usually refers to AB Generalists or ABG's.

* Defined as used in this study.

Man-Month Completion Rate See Completion Rate.

Management Unit The largest meaningful grouping of volunteers whose activities are directed toward common primary goals and objectives.

Management Unit Review Report The document which provides information about the problem being addressed, the activities undertaken, and the objectives sought for a group of volunteers being managed as a unit. Also referred to as a "204."

Math/Science Persons with graduate or undergraduate degrees in mathematics, biological or physical science.

Model An integrated process used for a significant period of time for programming/training volunteers into agricultural related activities.

On-Board Completion Rate See Completion Rate.

Population The totality of persons from which a sample or samples are taken for measurement statistically.

Project Description The document which provides information about the project and job(s) for use by the respective region, the Office of Recruitment and Communication (ORC) and the applicants. Also referred to as the "104."

Sample A part of a population used for purposes of investigating and comparing its properties.

Skill The classification of qualifications by subject matter, education, and/or experience.

Significant Difference A difference or variation between populations or groups that is due to characteristics or properties of the groups and not to chance.

Specialists Persons whose training and/or experience has prepared them technically for the job which they are performing.

Statistical Package for Social Sciences (SPSS) Computerized system of statistical analysis designed for behavioral science research.

Time-Adjusted Completion Rate See Completion Rate.

Trainee Arrival A person who enters Peace Corps training.

Trainee Start A person who enters Peace Corps training.

Volunteer Delivered Same as a Volunteer Start.

Volunteer Start A person who completes training and enrolls as a volunteer.

APPENDIX II

METHODOLOGY

A. Description

METHODOLOGY

This study was conducted in two phases. Phase One attempted to quantify the effectiveness of ABG's. Phase Two concentrated on qualifying the factors which contribute or constrain the ABG's effectiveness.

Phase One

Phase one was primarily concerned with a quantitative analysis of (a) completion of training and service rates, (b) costs of recruiting, placing, and training, and (c) cost-effectiveness of the major skills used in agricultural projects.

The population for the completion analysis was limited to volunteers who entered service after July 1, 1971 to October 31, 1974. Table A below provides information on the sample chosen from the population.

TABLE A
Completion Sample

	IO		Africa		LA		NANEAP	
Countries	26		9		11		6	
Projects[1]	129/292		27/81		65/122		37/89	
Proportion of Ag Sector PCV's	70%		62%		75%		65%	
Skill Composition:								
ABG	419	25%	99	30%	234	26%	86	19%
Ag Degree	317	19%	60	18%	111	12%	146	33%
AG Background	369	22%	75	23%	206	23%	88	20%
Bus. Admin.	227	14%	42	13%	161	18%	25	6%
Other	340	20%	52	16%	191	21%	97	22%
Total	1672	100%	327	100%	903	100%	442	100%
(Total) T Starts	1672	100%	327	20%	903	54%	443	26%
T Completion Rate	79%		79%		79%		80%	
V Starts	1325	100%	257	20%	718	54%	350	26%
V Completion Rate[2]	73%		78%		71%		73%	
V Average Months of Service	17.5		18.7		17		17.5	

[1] $\frac{\text{Projects Analyzed}}{\text{Total Agricultural Projects}}$

[2] $\frac{\text{Actual Months Served}}{\text{Potential Months}}$ (for completed projects)

The completion rate for training was simply the percentage of trainees who became volunteers. Various rates were calculated to measure completion of service. One method was the time adjusted man-month completion service rate for projects with elapsed time spans of six, twelve, eighteen and twenty-four months. Another method was the man-month completion rate for completed projects i.e. twenty-four months. The third method used was the active or volunteers-on-board rate at the six month intervals of a normal twenty-four month tour.

The sources for training and service completion data were the Peace Corps Master File and the Office of Recruitment and Communication (ORC) B-8 Reports. Additional information was obtained from the March 30,1974 Project Profile Update.

Upon identification of the projects to be included in the sample, a computer printout was obtained listing each individual, his/her status, service history, skill, date of birth, marital status, and education level. A separation was made of the volunteers by skill category, i.e. ABC's, Ag Degree, Ag Background, and Business Administration. Training and completion histories were then aggregated for the different skill categories by model, region, and IO wide. In addition, aggregation was made according to age, education and marital status. Detailed information on the completion histories are found in the Appendix III, under the title **Data Sources, A. Completion.**

The costs analyzed were recruitment (including processing up to the initiation of training) and training (up to the swearing in as a volunteer). Recruitment costs were provided by ORC from actual FY 74 expenditures. The training costs were calculated from the country budgets for overseas training and contracts for training in FY 74.

In order to take into account trainee attrition which increases the initial per capita cost of providing volunteers and, therefore, to make the cost calculations more meaningful, costs were expressed in terms of the actual average cost of a volunteer delivered. This was derived by dividing the trainee completion rate into the average cost per trainee.

Cost-effectiveness was expressed in terms of results, i.e. months of service related to expenditures, i.e. recruiting, training and support costs and was calculated for each of the major skills utilized in agricultural projects.

Comparison was also made of completion rates of the various models and of the skill categories within the models. BASICO, the training contractor for the Latin American Region, was the only model of sufficient size. All other models were country specific with a reduced number of observations. Aggregation was made, however, regionally which

provided three "models" in addition to BASICO. They were: (1) all L.A. projects not trained in BASICO; (2) all projects from the Africa Region; and (3) all projects from the NANEAP Region.

During the period in which training and service completion were analyzed, training was not constant. Each training projects was unique being affected by the particular demands of the program and the staff responsible for its direction. These limitations precluded any meaningful conclusions. It was apparent in Phase One that other methods would have to be employed in Phase Two in order to identify and assess the critical variables affecting the utilization of ABG's in Agriculture.

Phase Two

The three principal activities of Phase Two were: (1) an analysis of the Project Descriptions (104's) and the Management Unit Review Reports (204's) for current projects; i.e. those presently operating in the field; (b) field research in eleven Peace Corps countries which had been selected in consultation with the respective regional staff personnel and (c) an opinion survey through a questionnaire administered to volunteers working in agricultural programs in those countries with major agricultural programs.

The objectives of the analysis of the 104's and the 204's were to obtain a detailed understanding of the agricultural projects and to raise those issues which needed to be addressed in the field research. Information concerning the goals, the status, the training, the skills, the jobs, etc., was summarized for each current agricultural project using a project analysis sheet Appendix II, 1, is a sample of a project analysis sheet for the Animal Traction Project in Togo. This information, with a copy of the 104 and 204, was made available to each field researcher for all the projects in the countries he was to visit.

A synthesis of the findings of the 104/204 analysis was also prepared which identified the general characteristics of jobs for ABG's, the major constraints in achieving results, salient features of specific projects, etc. The most common type of job for ABG's requested in the 104's was that which involved the diffusion of a proven technology for which social skills (motivation, communications) were of primary importance and technical skills (assumed to be simple and easily acquired by the ABG) of secondary importance. The major constraints adverted to in the 104's were inadequately defined supervision, delays or non-delivery of supplies and equipment, and host agency bureaucracy. See Appendix III,C.- Project Analysis. An issue paper was also developed. These issues were written in the form of questions and group-

ed around areas of concern as effectiveness of ABG's, projects and jobs for ABG's, etc. See Appendix III, C, 1, Issues. The synthesis of the Project Analysis and the paper on Issues were used in the orientation of the field researchers.

The field research was conducted by seven people in eleven countries and utilized 142 man days of work. See Table B below for details on the countries visited and the resources employed.

TABLE B

Field Research

Country	Number of field Researchers	Working Days
Costa Rica	2	14
Columbia	1	7
El Salvador	2	20
Dahomey	1	2*
Guatemala	1	10
Nepal	2	22
Senegal	1	12
Paraguay	1	10
Phillipines	2	24
Sierra Leone	1	19
Upper Volta	1	2*
		144

*Political tensions caused visits to be shortened.

The objective of the field research was (a) to identify and qualify the critical programming, training and support variable and (b) to understand their interrelationship. The methodology was basically that of observing situations and dialoguing with volunteers, host country nationals, and Peace Corps staff. The emphasis was on the volunteer at his site relating to host country nationals both in working and living situations. The instruments were designed to facilitate the collection of information, observations and opinions.

The field research began with an orientation for the researchers in San Jose, Costa Rica in which the goals and objectives were discussed, the terminology defined, and the use of the instruments explained. Costa Rica also provided the opportunity to visit the BASICO Training Center and meet those who have been responsible for training ABG's for agricultural projects.

Two instruments were used to facilitate the field research, one a factor analysis sheet and the other an interview summary sheet. The factor analysis sheet, similar in form to the project analysis sheet, was designed to obtain specific information on each management unit in the agriculture sector. A sample is illustrated in Appendix II, B, 2. This was a working document and no intention was made to aggregate results. It assisted the researcher in understanding the particular sub-sector activity and in comparing it with other sub-sector activities. The interview summary sheet was used to record information relating to eight key issues. See Appendix II, B, 3 for a sample. It served primarily as an aid to memory. The intention was to complete these sheets after and not during the interview.

The questionnaire was sent to all volunteers working in agricultural projects in the twenty-five countries where Peace Corps has a major agricultural program. The objective of the questionnaire was to obtain the opinions of volunteers with respect to programming, training, support, and accomplishments of Peace Corps goals. It was disigned so that opinions could be compared by skill, jobs, age, length of service, etc. It also provided the volunteer with an opportunity to write in his comments on any of the questions. A forty percent response (385 questionnaires) from twenty-two countries was analyzed using the computerized Statistical Package for Social Science (SPSS) program. Information concerning the survey sample is found in Table C below.

TABLE C
SURVEY SAMPLE

Africa	No. of Responses	Latin America	No. of Responses	NANEAP	No. of Responses
Cameroon	29	Brazil	28	India	14
Dahomey	11	Columbia	9	Iran	0
Liberia	0	Costa Rica	27	Nepal	39
Mali	14	Dominican Rep.	15	Philippines	52
Niger	14	El Salvador	24	Tunisia	7
Senegal	18	Honduras	12	Morocco	8
Sierre Leone	24	Guatemala	0		120
Togo	2	Nicaragua	10		
Upper Volta	9	Paraguay	15		
	122	Venezuela	3		
			143		

APPENDIX II

METHODOLOGY

B. Instruments

1. Project Summary Sheet
2. Management Unit Analysis Sheet
3. Interview Summary Sheet
4. Questionnaire

APPENDIX II, B , 1. Project Summary Sheet

PROJECT ANALYSIS

SKILL MIX
Primary Subst.

_____ _____
_____ _____

COUNTRY: Togo

PROJECT TITLE: Animal Traction

PROJECT NUMBER: 693-74-01

REPLACEMENT _____ (____years) NEW_____

PROJECT GOALS: The improvement of agriculture through the introduction and popularization of animal traction technques. Establishing the animal traction center and motivating and teaching villagers to use animal traction and advising farmers in the use of animal traction. Equipping and staffing the center.

CURRENT STATUS (204): Major objective remains the completion of building, equipping and staffing the animal traction center; also the introduction to an adoption by several farmers per year of animal traction practices.

TRAINING WEEKS: 13 SITE: Kadjalla, Togo

PROJECT NUMBER: 693-74-01

JOB TITLE: Animal Traction

SKILLS

		Req	Min	Max	Actual
PRIMARY: Ag (02/A)	T's	10	8	12	NA
	V's	8	-	-	4

SUBSTITUTE: Crop Emphasis (02/B)
Agriculture Extension (02/H)
Livestock Emphasis (02/C)

JOB DESCRIPTION

JOB TYPE: Motivation, technical transfer
DEGREE OF STRUCTURE: Moderately structured to structured tasks
CO-WORKERS: Center workers and villagers
TRAVEL: To nearby villages
DUTIES: During the first year, the V's will work at the centers, during the second year, half the V's will work at the centers and the other half in nearby villages.

Volunteers complete the buildings equipping of centers, etc., and see that the centers start functioning, training animals, instructing center workers, etc. Motivate and train villagers in the techniques and advise in the use of animal traction

SITE: Rural, isolated center
LEVEL: Grassroots and lower end of delivery system, within system
CLIENT: Villagers and center workers
TECHNICAL ASSISTANCE: Government agency from funds and equipment from OXFAM, self-help
SUPERVISION: Government agency

PROBLEMS/COMMENTS

Disinterest of local farmers; the inability or instable purpose of the HC agency to manager and support the program consistently; the incipient use of tractors in the same region. MU states problems with early terminations.

APPENDIX II, B, 2. Management Unit Summary Sheet

Management Unit Analysis
(work sheet)

M.U. # 5-1-1 (1)

M.U. Title Rural Animation Country Senegal

FACTOR				ANS.	COMMENTS
Volunteers	FY75	FY76	FY77		
1. Man-Power Input:					
a) ABGs	14	24	?		
b) Ag Degree					
c) Ag Background					
d) Other					
Total #					
2. Male/Female				all male	
3. Single/Married				all single	
Jobs (score: + 0 -)					
4. Host agency specificity				0	
5. Client specificity				–	
6. Technology or task specificity				–	
7. Number of tasks or activities				many	could be well digging, gardening, construction & operation of dispensaries or water storage / small livestock
8. Transfer effect present				–	zero!
Training					
9. Weeks of training				10	language
10. Proportion training time					
a) language				75	
b) technical				15	
c) cross cultural				10	
11. Proportion technical training					
a) theoretical				0	
b) empirical				100	
12. Trainees/instructor				4	
13. Instructors' binational ratio				25%	HCN
14. Proportion instruction by					
a) Training Staff				.	consisting of
b) P.C. Staff					
c) PCV's					
d) H.C.N.				4	

FACTOR		COMMENT
Training Cont'd		
15. Behavioral objectives established (Yes-No)	yes	
16. Qualification process applied (Yes-No)	yes	± not too much
Project		
17. Availability of supervision by HCN (score: 1-5)*	2	actual, practical
18. Availability of supervision by PC Staff (score: 1-5)*	3	
19. Availability of technical assistance (score: 1-5)*	4	
20. Availability of supplies and equipment (score: 1-5)*	4	PCVs have to "organize" it
21. ~~Value~~ % of supplies and equipment/PCV/yr.		
a) From Host Country	20	
b) From Peace Corps	0	
c) " third party sources	80	
22. In-service training		
a) Cost/Volunteer	?	
b) Conferences and workshops (days/yr)	5 days/yr	mainly language
23. Job activity in urban/rural setting (proportion)	20/80	actual field
24. Volunteers utilize (~~VARs~~)	no	Vol. Act. Report
25. Objectives being met (Score: 1-5)*	3-4	

Interviewer FRW
Initials

*Score: 5 = always, 4 = usually, 3 = sometimes, 2 = rarely, and 1 = never

good: "parachute" model used backing (sec 20) good for II & III

but not too directly advising main pickle

attr: good record

APPENDIX II, B, 3. Interview Summary Sheet

INTERVIEW SUMMARY

Interviewer [illegible]
Initials

Date August 13, 1975

Interviewee: PCV skilled
PCV generalist ✓
PC staff
HCN direct
HCN indirect

Salige Ag 13 Sal

1. The Host Country: position vis a vis Peace Corps; use of generalists

Fell no problem with acceptance - best described as benign neglect Local Extension agent has been helpful & positive although he is in a different field (Animal Husbandry)

2. The Peace Corps Staff: policy and position with respect to program development; responding to host country needs; obtaining requests.

NA

3. The Candidate: qualifications; matching skills to fit position needs.

Training is the best time to pick the volunteers, Personal motivation and desire most important

4. Jobs for Generalists: structure (how); definition (what); type;

should be directed towards some specific project at beginning but not as closed in that one can't branch out to other things depending on local situation.

5. Training for Generalists: technical pre and in-service. Training has to have as much field work as possible without sacrificing language This is especially important so that vols will understand the nature of the job by getting their hands dirty.

6. Supervision of Generalists: by HC agency, by PC.

The H.C agency should provide it but they hardly do it for their own agents. A good counterpart system could replace supervision from either P.C. or host agency.

7. Support of Generalists: job related equipment and materials; transportation; technical assistance.

Very little equipment etc needed and that seemed to be the best time what there is is so hard to get anyway - even for Salvador Ag. Extensionists.

8. Effectiveness of Generalists: in relations to each of Peace Corps goals;

Volunteer himself feels satisfied with regards to all three - but not sure how community feels

APPENDIX II, B, 4. Questionnaire

ABGs in Agriculture Study

Agriculture Sector Volunteer Questionnaire

V 9 9
1 2 3

2 3 4,5 1. Age 23

1 6 2. Sex M

1 7 3. Marital Status [X] single [ ] married

5 8 4. Education year graduated H. S. 19 70

5 9 years of college completed 1 2 3 (4) 5 6

Degree [ ] AA [X] BA (BS) [ ] Grad Degree

or certificate _____

Major Zoology

3 10 5. Description and length of time engaged in agricultural work prior to P. C. service Lived on farm 8 years; worked with veterinarians several years; AI training course

1 11 6. Training Site(s) a) Nepal, b) _____, c) _____

5 12 7. Weeks of training at sites a), b),

a) 12, b) _____, c) _____

Ø 13

5 14 8. Months of P. C. service 5

3 15 9. The kind of work sites (rural, i.e., a village, a town, or urban, i.e., a city, a capital of country) where

B 16 you have been assigned and the time spent there.

Rural or Urban	Time (months)
Country capital	5

5 17 10. Job Title* NJ specific title

11. Job Description organizing & implementing AI program – training, extension, followup

1 18 12. Job skills (describe skills needed to perform your job)

Working knowledge of setup of AI programs; animal husbandry knowledge – health care, etc.

*Presumes you are presently working in an agricultural project. If you have been transferred to another sector, please answer the question in relation to your ag assignment and specify reasons for transfer on last page.

In question 13 to 19 score on a scale of one to five by circling the appropriate number your opinion of the following: (feel free to comment on any issue related to the question)

[3] 19 13. How structured do you feel your present job is? (Structured here defined as a job with regular working hours and clear line of authority, supervision and reporting procedures.)

little 1 2 (3) 4 very 5

Comment Job definition was very poor to begin with.

[2] 20 14. How specific is the target population who benefits from your services? (vague - all farmers in country, to precise - 50 rice farmers in ABC province)

vague (2) 3 4 precise 5

Comment

[2] 21 15. How well defined is your job? i.e. the tasks you are expected to perform.

vague (2) 3 4 precise 5

[9] 22 Comment self-defined according to need as I see it.

[3] 23 16. How competent do you feel you are in performing your job?

barely 1 2 (3) 4 very 5

Comment Much of my knowledge has been acquired from books, materials, etc. since I arrived in country.

[1] 24 17. Are you transferring your skills to host nationals? (counterparts, target population) i.e. are they learning to do your job or acquiring your skills?

no (1) 2 somewhat 3 4 yes 5

Comment No arrangements have been made for a counterpart.

18. Is your job appropriate for a P.C. Volunteer (responds to Host Country need for trained manpower). [2] 25

inappropriate — most appropriate

1 (2) 3 4 5

Comment More qualified person is needed, i.e., someone from this position in U.S.

19. How do you rate your job performance? [3] 26

poor — average — excellent

1 2 (3) 4 5

Comment I have a hard time correlating what's expected of me, what's needed in the program, and what I am capable of doing. [9] 27

20. Number in order of priority three of the statements below which you feel have contributed to achieving results.

- [ ] well defined job and project
- [ ] Peace Corps Training [3] 28
- [1] Peace Corps staff support [5] 29
- [3] my personal ability [4] 30
- [2] other (specify) lack of previous results

21. Number in order of priority three of the statements below which have been constraints to achieving results.

- [ ] poorly defined job
- [2] ineffective technical assistance [3] 31
- [1] inadequate supplies and equipment [2] 32
- [ ] lack of supervision [5] 33
- [3] my inexperience
- [ ] environment, culture, or physical condition
- [ ] other (specify)_____

In questions 22 to 24 score on a scale of one to five your opinion of the following:

3 34 22. How would you describe your language ability?

poor fluent

1 2 (3) 4 5

If not applicable i.e. English used, please check square ☐

3 35 23. How would you rate your interpersonal relationships with host nationals?

	poor				excellent
on the job:	1	2	(3)	4	5
outside the job:	1	2	(3)	4	5

Comment Have trouble identifying with host country nationals

3 36 24. How necessary is technical training for your job?

Not Very

1 2 3 4 (5)

Comment Am in a job I would not normally be qualified for, but I am the most qualified person here.

5 37

25. Number in order of priority three of the following kinds of continued technical training which would be helpful to you.

[2] formal courses

[ ] conferences or work shops

3 38 [3] on-the-job training

1 39 [ ]

5 40 [ ] visits by technicians

[1] study

[ ] not needed

[ ] other (specify)

Comment _____

_____

26. Number in order of priority three of the following sources from which you are receiving supervision and/or assistance.

- [1] Peace Corps staff
- [2] host country agency personnel — [1] 41
- [ ] volunteer leader — [2] 42
- [3] other volunteers — [4] 43
- [ ] international development organization personnel (specify) _____
- [ ] other (specify) _____

Comment _____

27. Number in order of priority three of the following sources of supplies and equipment from which you are receiving assistance.

- [1] host country agency — [1] 44
- [2] Peace Corps (direct) i.e. country budget — [2] 45
- [ ] Peace Corps (indirect) e.g. School Partnership Program — [9] 46
- [ ] International development organization (specify)_____
- [ ] friends in the U.S.
- [ ] other (specify)_____

In questions 28 to 32 score on a scale of one to five your opinion on the following:

28. How useful has the agricultural or job related training been which you have received? — [2] 47

unsatisfactory — average — excellent

1 (2) 3 4 5

Comment My PC technical training was very poor.

29. How would you qualify the supervision and assistance which you have received? — [3] 48

unsatisfactory — average — excellent

1 2 (3) 4 5

35. Promoting a better understanding of Americans on the part of the people served. [3] 57

poor excellent

1 2 (3) 4 5

Comment _____

_____

36. Promoting a better understanding of other people on the part of Americans. [3] 58

poor excellent

1 2 (3) 4 5

Comment _____

_____

37. Have you any suggestions on agricultural projects or jobs which would be appropriate for Peace Corps? [9] 59

1. Stay out of highly technical projects; i.e, artificial insemination, etc.

2. _____

_____

3. _____

_____

38. Have you any suggestions for better utilizing your skills and experience in the agriculture sector? Give me a job commensurate with my skills and experience

056

39. AB Generalists, i e. graduates with liberal arts degrees when trained to do specific jobs can perform effectively in agricultural projects. Do you agree or disagree with this statement? [1] 60

☒ agree ☐ disagree

Please comment In some developing countries, a technically trained person can be too skilled.

40. Please feel free to add suggestions on any issues relating to Peace Corps programming, training, or supporting of agricultural projects.

Either give more support to technically-oriented jobs, or don't recruit people for these types of jobs.

APPENDIX III

DATA SOURCES

A. Completion

I.O. Wide

Comparative Completion Data
Agriculture ABG Study
July 1971 - October 1974

Length of Service	Ag Degree									ABG									Ag Background								
	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*
0-6	18	13	% 72							11	7	% 64							23	13	% 57						
6	51	45	% 88	% 97				44	% 98	94	82	% 87	% 98				77	% 94	58	43	% 74	% 87				34	% 79
12	112	91	% 81	% 98	% 89			70	% 77	87	68	% 78	% 97	% 90			56	% 82	86	69	% 80	% 91	% 81			47	% 68
18	12	10	% 83	% 100	% 100	% 100		10	% 100	57	51	% 89	% 96	% 91	% 85		35	% 67	44	35	% 80	% 100	% 94	% 88		27	% 77
24	118	108	% 92	% 98	% 94	% 89	% 85	80	% 74	142	111	% 78	% 98	% 90	% 83	% 79	72	% 65	164	118	% 72	% 91	% 82	% 76	% 72	70	% 59
ALL	311	267	% 86	% 97	% 92	% 90	% 85	204	% 80	391	319	% 82	% 97	% 90	% 84	% 79	240	% 77	375	278	% 74	% 91	% 83	% 79	% 72	178	% 67
	Total Actual Months = 3598 = 87% Total Potential Months 4113									Total Actual Months = 4077 = 84% Total Potential Months 4864									Total Actual Months = 3499 = 77% Total Potential Months 4562								

* V Active Rate = $\frac{\text{\# V's on board or completed service}}{\text{\# V starts for projects older than 6 months}}$

AFRICA

Comparative Completion Data
Agriculture ABG Study
July 1971 - October 1974

Length of Service	Ag Degree									ABG										Ag Background									
	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*
0-6	4	4	% 100							7	5	% 71							2	1	% 50						
6	18	16	% 89	% 98				15	% 94	23	20	% 87	% 96				18	% 90	14	5	% 36	% 73				3	% 80
12	26	17	% 65	% 97	% 94			15	% 88	23	18	% 78	% 100	% 100			18	% 100	25	18	% 72	% 95	% 88			14	% 78
18	0	0	-	-	-			-	-	18	15	% 83	% 97	% 89	% 81		9	% 60	0	0	-	-	-	-	-	-	-
24	12	12	% 100	% 97	% 91	% 86	% 83	9	% 75	28	25	% 87	% 97	% 89	% 82	% 77	16	% 64	34	27	% 79	% 99	% 93	% 89	% 87	22	% 81
ALL	60	49	% 82	% 97	% 93	% 86	% 83	39	% 87	99	83	% 84	% 97	% 92	% 82	% 77	61	% 78	75	51	% 68	% 95	% 91	% 89	% 87	39	% 78
	Total Actual Months = 525 = 89% Total Potential Months 588									Total Actual Months = 1013 = 84% Total Potential Months 1206									Total Actual Months = 776 = 86% Total Potential Months 894									

* V Active Rate = $\frac{\#\text{ V's on board or completed service}}{\#\text{ V starts for projects older than 6 months}}$

LATIN AMERICA

Comparative Completion Data
Agriculture ABG Study
July 1971 - October 1974

Length of Service	Ag Degree									ABG									Ab Background								
	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*
0-6	10	7	% 70							4	2	% 50							19	12	% 63						
6	10	7	% 70	% 88				5	% 71	70	61	% 87	% 99				58	% 95	29	23	% 79	% 85				18	% 78
12	41	35	% 85	% 92	% 82			23	% 66	39	34	% 87	% 96	% 85			24	% 71	36	31	% 86	% 90	% 79			21	% 68
18	7	7	% 100	% 100	% 100	% 100		7	% 100	17	17	% 100	% 100	% 99	% 98		16	% 94	36	29	% 81	% 100	% 93	% 88		22	% 76
24	36	32	% 89	% 97	% 91	% 84	% 79	20	% 63	78	58	% 74	% 98	% 97	% 85	% 80	38	% 66	92	62	% 67	% 87	% 76	% 70	% 66	32	% 52
ALL	104	83	% 85	% 94	% 88	% 87	% 79	55	% 68	208	172	% 83	% 98	% 91	% 88	% 80	136	% 80	212	157	% 74	% 90	% 81	% 74	% 66	93	% 64
	Total Actual Months = 1098 = 82% Total Potential Months 1335									Total Actual Months = 2117 = 87% Total Potential Months 2446									Total Actual Months = 1857 = 73% Total Potential Months 2534								

III-3

*V Active Rate = # V's on board or completed service / # V starts for projects older than 6 months

31

32

NANEAP

Comparative Completion Data
Agriculture ABG Study
July 1971 - October 1974

Length of Service	Ag Degree									ABG									Ag Background								
	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*
0-6	4	2	50%							0	0	-							2	0	0%						
6	23	22	96%	100%				22	100%	1	1	100%	100%				1	100%	15	15	100%	94%				13	87%
12	45	39	87%	99%	93%			32	82%	25	16	64%	94%	91%			14	88%	25	20	80%	88%	77%			12	60%
18	5	3	60%	100%	100%	100%		3	100%	22	19	86%	92%	86%	77%		10	53%	8	6	75%	100%	96%	92%		5	83%
24	70	64	91%	98%	96%	91%	88%	51	80%	36	28	78%	99%	89%	81%	77%	18	64%	38	29	76%	91%	84%	78%	71%	16	55%
ALL	147	130	88%	99%	95%	92%	88%	108	84%	84	64	76%	96%	88%	80%	77%	43	67%	88	70	80%	92%	83%	80%	71%	46	65%
	Total Actual Months / Total Potential Months = 1976 / 2190 = 90%									Total Actual Months / Total Potential Months = 961 / 1212 = 79%									Total Actual Months / Total Potential Months = 866 / 1134 = 76%								

III-4

33

34

* V Active Rate = # V's on board or completed service / # V starts for projects older than 6 months

Comparative Completion Data
Agriculture ABG Study
July 1971 - October 1974

Length of Service	Business Administration									Math/Science									
	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*	T Starts	V Starts	Training Completion Rate	Volunteer Man-Month Completion Rate Program Length 6	12	18	24	#V's active or completed	V Active Rate*
0-6	1	0	0%							12	10	83%						
6	48	32	67%	90%				27	84%	2	2	100%	100%				2	100%
12	44	36	82%	97%	90%			24	67%	22	20	91%	88%	79%			11	55%
18	29	22	76%	94%	89%	82%		15	68%									
24	101	83	82%	88%	77%	72%	67%	43		23	18	78%	92%	82%	79%	75%	12	67%
ALL	223	173	78%	91%	82%	74%	67%	109	63%	59	50	85%		80%	79%	75%	25	50%
	Total Actual Months = 2214 = 74% Total Potential Months 3002									Total Actual Months = 525 = 77% Total Potential Months 684									
	Total Actual Months = ____ = Total Potential Months																		

III-5

35

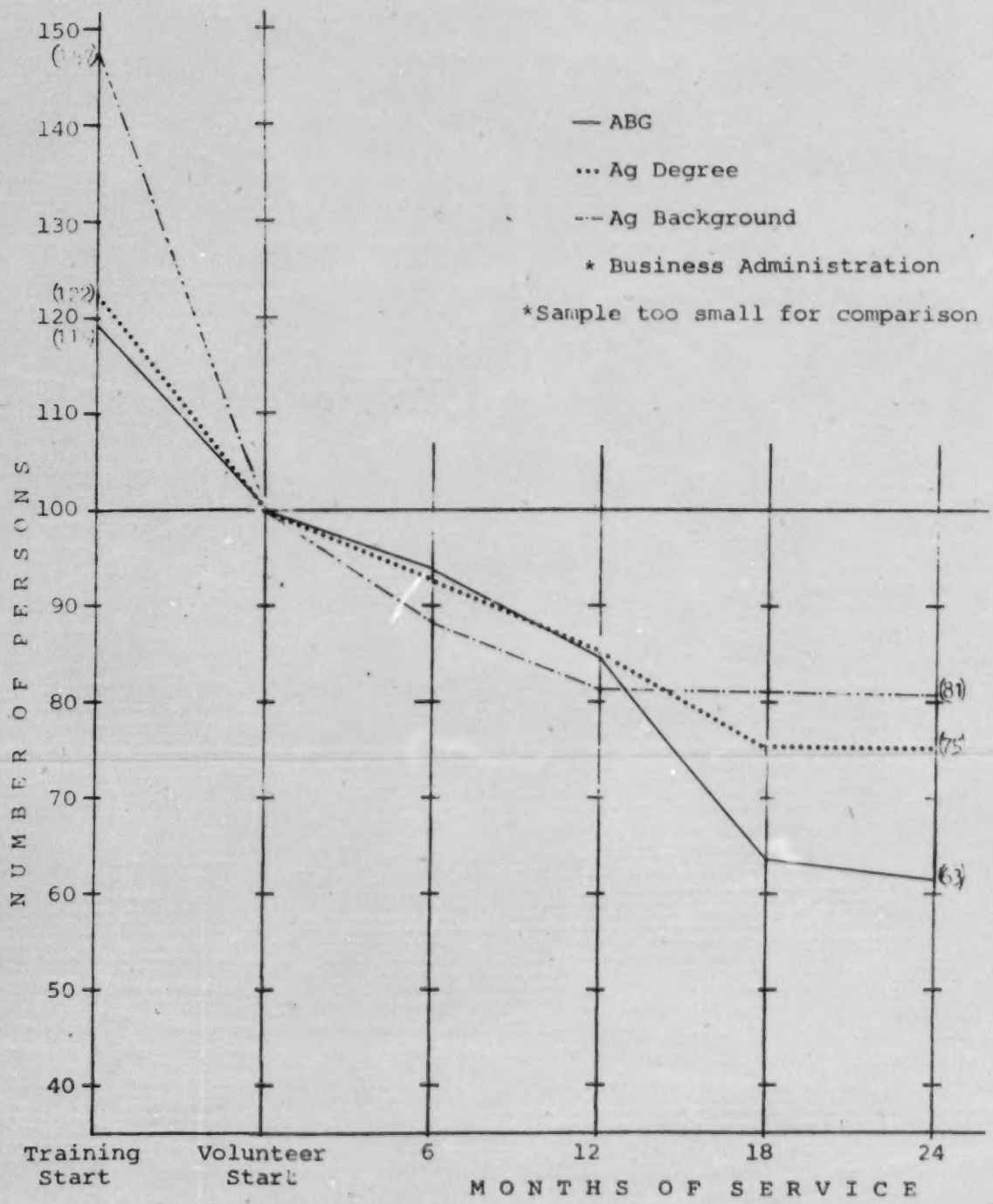
36

* V Active Rate = # V's on board or completed service / # V starts for projects older than 6 months

Agriculture Sector Completion Histories

Africa

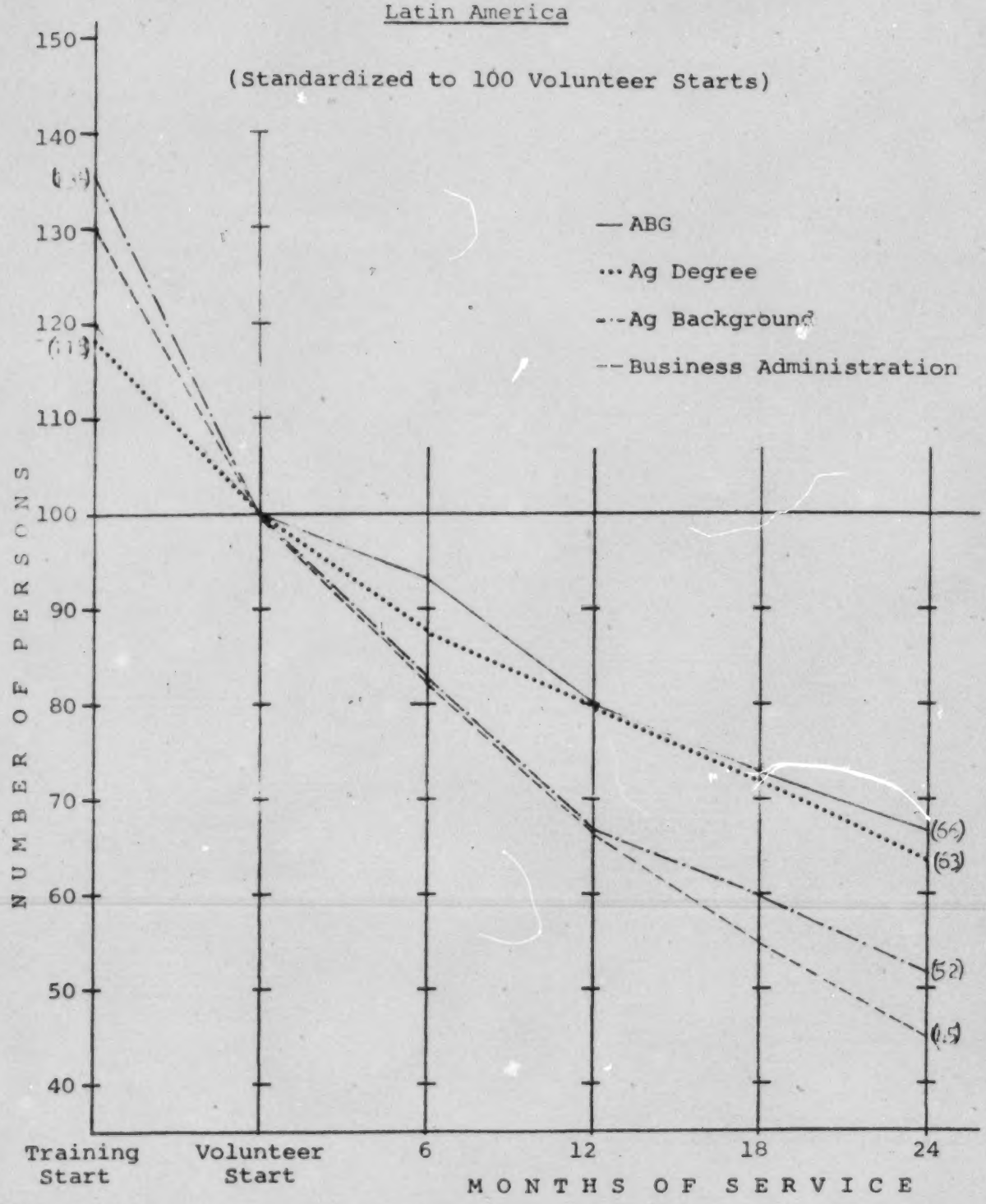
(Standardized to 100 Volunteer Starts)



Agriculture Sector Completion Histories

Latin America

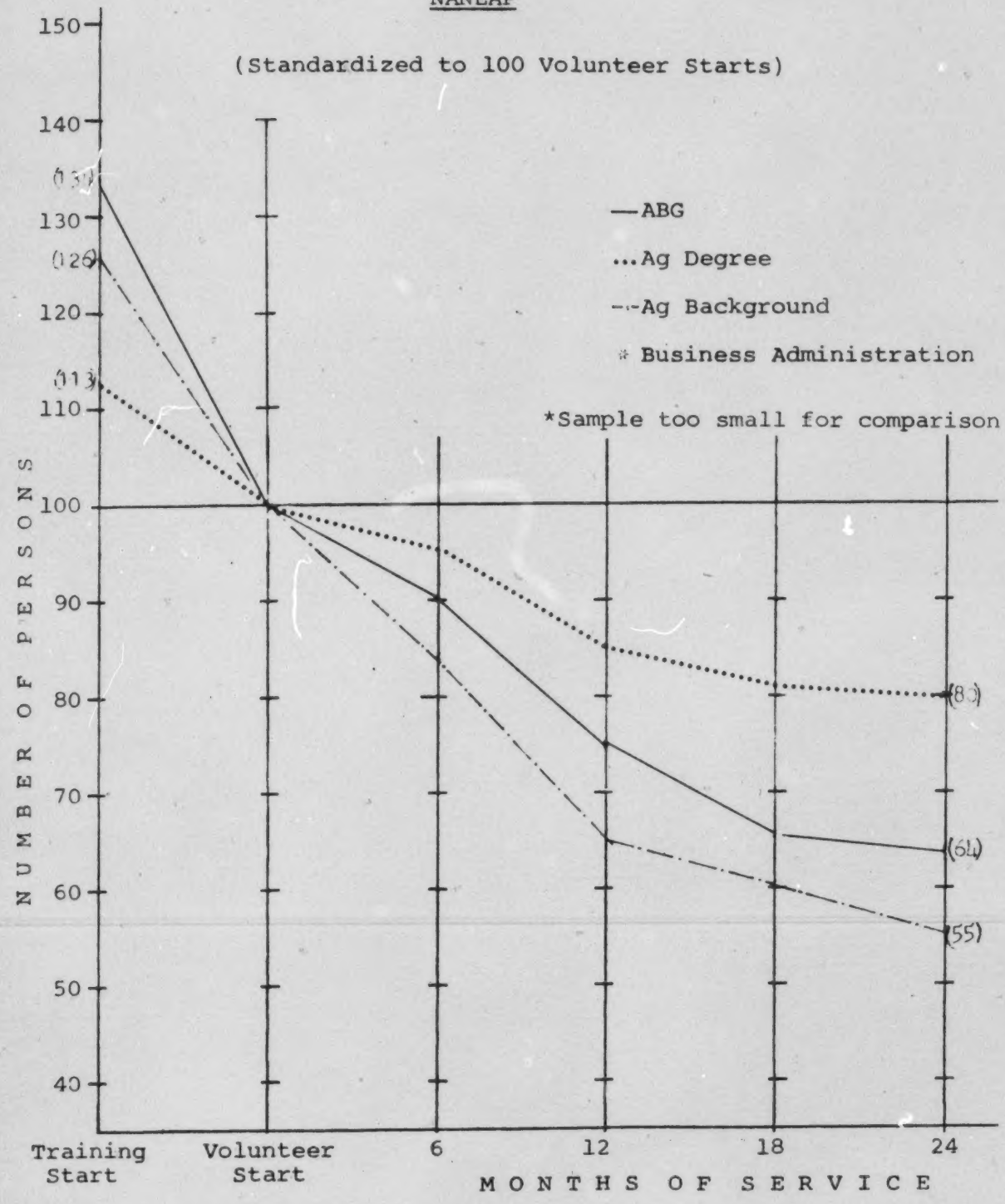
(Standardized to 100 Volunteer Starts)



Agriculture Sector Completion Histories

NANEAP

(Standardized to 100 Volunteer Starts)



Comparative Completion Analysis by Special Categories

The following attrition/completion comparisons were made.

1. Age. This category was broken into three categories: Under 21, age 21-20, and over 29. Of the 1,462 trainees in the sample, 90% fall into the 21-20 range. This group has both the highest training completion (80%) and the highest completion of service (76%). Interestingly the completion of service is the same for the under 21 and the over 29 groups.

	Completion	
	Training	Service
20 years or less:	64%	66%
21-29:	80%	76%
30 years or more:	71%	66%
Av. PCV*	84%	82%

2. Education level. This class was also broken into three categories: High school degree or less, high school degree through two years of college, and more than two years of college. There was a steady increase in completion rates with each rise in education level.

	Completion	
	Training	Service
High school degree or less:	53%	50%
Two years of college:	78%	57%
More than two years of college:	81%	82%
Av. PCV*	84%	82%

In addition the special category of Associate Agricultural Degree (AA) was examined. It contained a sample of 21 T inputs and 15 V starts which can hardly be indicative of any

*All projects, all sectors

trends, especially when the 24-month completion rate represents only two volunteers. Nonetheless, the following was found:

	Completion Training	Completion Service
AA degree:	71%	94%

3. Married volunteers - married people have the highest training completion of any other group. NANEAP's sample of 102 had very positive results with 92% training completion and 90% service completion.

	Completion Training	Completion Service
Married PCVs:	85%	67%
Single PCVs:	77%	82%
Av. PCV	84%	82%

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*Completion Rates

Training- the number of trainees who finish divided by the number who started training.

24 Month Service- the actual months of service divided by the potential months of service for completed (24 month) projects.

Time Adjusted- the actual months of service divided by the months that have elapsed in the life span of the project at the time survey was taken.

AGE Category	Group	# Trainees	Training Completion	MAN MONTH COMPLETION 6 mo	12 mo	18 mo	24 mo	Time Adjusted Completion
20 yrs. or less	ALL	64	64%	87%	82%	71%	66%	68%
20 yrs. or less	LA	38	66%	84%	80%	68%	62%	63%
20 yrs. or less	NANEAP	19	58%	89%	81%	75%	72%	71%
20 yrs. or less	AFRICA	7	71%	100%	100%	100%	100%	100%
21-29	ALL	1309	80%	94%	87%	81%	76%	82%
21-29	LA	685	79%	93%	85%	79%	71%	80%
21-29	NANEAP	346	83%	94%	88%	84%	81%	83%
21-29	AFRICA	278	78%	94%	93%	84%	81%	84%
30 yrs. or more	ALL	89	71%	94%	85%	76%	66%	72%
30 yrs. or more	LA	58	71%	92%	83%	72%	58%	64%
30 yrs. or more	NANEAP	22	73%	98%	88%	100%	100%	93%
30 yrs. or more	AFRICA	9	67%	100%	100%	100%	100%	100%

42-a

42b

Education Category	Group	# Trainees	Training Completion	MAN MONTH COMPLETION 6 mo	12 mo	18 mo	24 mo	Time Adjusted Completion
High School deg. or less	ALL	78	53%	82%	74%	62%	50%	60%
High School deg. or less	LA	54	48%	78%	74%	62%	46%	56%
High School deg. or less	NANEAP	18	72%	86%	68%	56%	52%	62%
High School deg. or less	AFRICA	6	78%	92%	80%	67%	57%	100%
High School deg. thru 2 yrs. college	ALL	132	78%	92%	80%	67%	57%	63%
High School deg. thru 2 yrs. college	LA	97	81%	91%	78%	66%	55%	59%
High School deg. thru 2 yrs. college	NANEAP	23	61%	94%	82%	69%	56%	67%
High School deg. thru 2 yrs. college	AFRICA	12	83%	100%	97%	86%	80%	89%

Education (Cont'd) Category	Group	# Trainees	Training Completion	MAN MONTH COMPLETION 6 mo	12 mo	18 mo	24 mo	Time Adjusted Completion
More than 2 yrs. college	ALL	1156	81%	95%	89%	85%	82%	84%
More than 2 yrs. college	LA	534	81%	95%	87%	85%	80%	84%
More than 2 yrs. college	NANEAP	346	83%	94%	89%	85%	84%	85%
More than 2 yrs. college	AFRICA	276	78%	94%	93%	85%	82%	85%
AA's	ALL	21	71%	96%	94%	85%	94%	84%
AA's	LA	10	70%	100%	100%	77%	none	79%
AA's	NANEAP	8	75%	100%	100%	100%	94%	97%
AA's	AFRICA	3	67%	67%	58%	none	none	58%

MARITAL STATUS Category	Group	# Trainees	Training Completion	6 mo	12 mo	18 mo	24 mo	Time Adjusted Completion
Married Vols.	ALL	332	85%	97%	88%	77%	67%	73%
Married Vols.	LA	204	83%	95%	84%	71%	58%	64%
Married Vols.	NANEAP	102	92%	100%	98%	94%	90%	93%
Married Vols.	AFRICA	26	77%	100%	89%	89%	80%	79%
Single Vols.	ALL	1034	77%	93%	86%	84%	82%	*84%
Single Vols.	LA	481	77%	93%	85%	87%	85%	87%
Single Vols.	NANEAP	285	77%	91%	84%	80%	77%	79%
Single Vols.	AFRICA	268	78%	94%	91%	85%	82%	86%

APPENDIX III

DATA SOURCES

B. Costs

TRAINING COSTS

AFRICA

Country	Total Training Cost (1,000's)	Trainee-Weeks Total	Trainee-Weeks Cost Per	Ag. Sector Training length	Ag. Sector #Sample Trainees Population
Sierre Leone	121.28	954	127	8**	29
Liberia	277.12	2015	138	8**	77
Dahomey	50.24	383	131	12	63
Niger	134.59	642	210	14.4	31
Senegal	73.2*	530	138	12.5	31
Upper Volta	46.78	280	167	12	23
Mali	31.66	195	162	12.9	14
Togo	88.51	398	222	14	19
Cameroon	83.63	251	333	12	41

* 16.5 ICT and 56.7 contract ($189/contact trainee week)

** Average training. Length without Liberia and Sierra Leone is 12.79 wks.

$$\frac{\text{Ag Sector Cost}}{\text{Ag Sector T-weeks}} = \frac{\$658,666}{3650} = \$180.46/\text{Trainee Week}$$

$$\frac{\text{Ag Sector T-weeks}}{\text{Sample Ag T's}} = \frac{3650}{327} = 11.16 \text{ Weeks of Training}$$

11.16 wks X $180.46 = $2013.93 (Training cost per Trainee)

LATIN AMERICA

(NON-BASICO)

Country	Total Training Cost ($1,000) ICT Cost	Contract[1]	Trainee-Weeks Total[2]	Cost Per	Agric. Sector Training Length	# Sample Trainees
Brazil	$436.5	$ 73.32	2820	$181	12	148
Colombia	16.5	315.4	2160	154	12	132
Dom. Republic	1.5	20.9	178	188	10	20
El Salvador	118.85	- -	736	161	12	24
Guatemala	154.78*	- -	528	293	12	37
Honduras	70.3	- -	418	168	12	- -
Paraguay	11.9	- -	116	103	--	- -
Peru	112.5*	- -	932	121	10	87
Venezuela	142.99	45.0	1236	152	12	17

* includes contract cost

1 includes PRLC agricultural training ($254.5/ trainee week)

2 includes ICT training weeks for centralized contract trainees and total PRLC agricultural training

$$\frac{\text{Ag Sector Cost}}{\text{Ag Sector T-Weeks}} = \frac{925810}{5426} = \$170.6/\text{Trainee-Week}$$

$$\frac{\text{Ag Sector T-Weeks}}{\text{Sample Ag Ts}} = \frac{5426}{470} = 11.5 \text{ Weeks of Training}$$

11.5 weeks x $170.6 = $ 1962 (Training Cost per Trainee)

LATIN AMERICA

(BASICO)

FY '74 T-weeks = 2214 T-weeks
Contract cost = $375,110
Cost per Tw = $169.43
Sample T-weeks = 5148 T-weeks
Total Ag Sector Cost = $889,169
Sample Ts = 432 Trainees
Average Training length = 12.25 weeks
Average Training Cost Per Trainee = $2059

The weighted average training length of BASICO and ICT training in conjunction with BASICO is 13 weeks. The cost per trainee week remains $169/wk when ICT weeks are included. The cost per trainee is increased by the increase in training length, yet, this cost does not reflect the actual training cost of the BASICO model, rather it reflects a particular country decision in FY '74 to conduct a few weeks of ICT for BASICO trainees.

	Training Weeks			
Country	ICT	BASICO	Sample	# Trainees
Dom. Rep.	2	12	64	
El Salvador	2	10	8	
Paraguay	2	10	35	
Venezuela	4	12	27	
Costa Rica	-	14	27	
Nicaragua	-	12	63	
Honduras	-	12	47	
Guatemala	-	12	113	

NANEAP

Country	Total Training Cost (1,000's)	Trainee-Weeks Total	Cost Per	Agric. Sector Training Length	#Sample Trainees
India	60.255	252	239.1	12	71
Nepal	96.48	1114	86.6	11	132
Iran	250.73	948	264.5	12	21
Morocco	385.04	1560	246.8	12	38
Tunesia	186.14	1138	158.3	12	20
Philippines	424.48	2312*	183.6	8*	160

8 wks.* assumed training length (used in attrition and completion analysis); Philippine trainee arrivals are sworn in as volunteers upon arrival into the country.

$$\frac{\text{Ag. Sector Cost}}{\text{Ag. Sector T-wks}} = \frac{781,683}{4532} = \$172.48 \quad \text{/Trainee-Week}$$

$$\frac{\text{Ag. Sector T weeks}}{\text{Sample Ag Ts}} = \frac{4532}{442} = 10.25 \text{ weeks Agric. Training}$$

10.25 wks X $ 172.48 = $1768 (Training Cost per Trainee)

I.O. Wide

	Trainee-Weeks	Training Cost	Trainees
AFRICA	3650	658,668	327
L.A. (NON-BASICO)	5426	925,810	470
L.A. (BASICO)	5290	889,169	432
NANEAP	4532	781,683	442
Total	18898	$3,255,330	1671

Ag. Sector Project Training Length = 11.31 wks
Cost Per Trainee-Wee = $172.26
Training Cost Per Trainee = $1948.26

****

VOLUNTEER SUPPORT COSTS

I.O. Wide

Total Direct Costs: $33,143,000
Total Return Trip Cost: $2,287,000
Volunteer Man-Years: 6,489
Average Return Trip cost: $652

$$\frac{\text{Total Direct Cost - Total Return Trip Cost}}{\text{Volunteer Man-Years}} = \frac{\$30,856,000}{6,489} = \$4755 \text{ per man-yr.}$$

$$\frac{\text{Cost per man-year}}{12} = \$396.26 \text{ per service month}$$

APPENDIX III

DATA SOURCES

C. Project Analysis

PROJECT ANALYSIS

Phase One of the ABG study included a review of all currently available agricultural Project Descriptions (104's) and Management Unit Review Reports (204's). The following observations were found to hold true for better than 90% of the agricultural projects.

I. Jobs for ABG's within the agricultural sector have the following characteristics:

1. ABG's operate at the grass-roots level or in positions at the end of the host country agency's delivery system.

2. The jobs involve diffusion of a proven technology and/or teaching this technology to others, e.g. the job is "motivational" - convincing the farmers to accept and adopt more modern technology and/or transferring the skills needed to utilize that technology.

3. Few jobs involve research (beyond simple data collection).

4. Few jobs involve managerial functions.

5. Communication is an integral part of the job and interpersonal and language cross-cultural skills are stressed.

6. The tasks required by a job programmed for generalists are often detailed. The job requires many tasks and the tasks are specifically defined.

7. Most jobs located in rural areas.

8. Frequent travel is indicated but not clearly defined.

II. Many agricultural project 104's show a weakness or are unclear in the following areas:

1. Supervision - a title or name may be given but the quality or frequency of supervision is not determined.

2. Technical assistance and support - the non-integration of jobs into the host agency's organizational structure and non-delivery of promised supplies and equipment are frequently mentioned as problems. Lack of or inadequate transportation is also a problem.

3. Bureaucratic hassels (red tape, interagency disputes, inefficiency and overlapping authority among host agencies) are often mentioned as obstacles to the success of agriculture projects.

The following observations were found to hold true to certain projects or countries:

I. Use of ABG's could be increased by rewriting job descriptions so that those requiring technical skills and performance of many tasks remain assigned to specialist volunteers and those requiring social skills and the performance of one or two tasks are assigned to ABG's. Agricultural projects in Nicaragua, Colombia, and Niger are examples of projects where, with some restructuring of tasks, there would be jobs available for generalists. Presently these projects used only skilled volunteers.

II. Projects using ABG's have been terminated in some cases because of lack of HC support and integration into the infrastructure. Thus, when the HC agency requests the projects be started again the PC staff program specialists at a more complex level to avoid the pitfalls of the original project. This has been the case in school gardens and agricultural education projects in the Ivory Coast and in Togo.

III. In French-speaking Africa and in some Latin American countries it was essential that the PCV be fluent in two languages.

IV. A specialist project in Venezuela and an ag background project in Guatemala seem to be the only agricultural projects within the LA region where the 104's indicate good host country support.

V. Projects which are well coordinated and support (resources and technical assistance) are those which involve research teams composed of UN, AID types (Brazil) or where skilled PCV's are included as leaders and technical resource people for generalist and ag background projects. Several projects in El Salvador and one project each in Costa Rica and Guatemala use this type of programming. Sierra Leone uses ag degreed persons for providing technical assistance and resources for the generalist volunteer. Nepal also uses the more skilled volunteer this way, and in the delivery system to expedite matters for the ABG's. Nepal also used a scheme in the water project where the more skilled volunteers did the same kind of work as the generalist volunteers during the first year and then in the 2nd year when they had more knowledge of the country and its ways, moved into a job where he could support the ABG's. Nepal also is (was) one of the few countries to program biology degree skills in an extension project (fisheries).

VI. Dahomey displays the greatest flexibility in using generalist volunteers: there are 5 to 7 individual projects requiring the generalist, but the volunteer is not invited to any one of these jobs; that is the volunteer does not know just what kind of job he will be doing (although in any case he will be doing extension work) when he boards the plane. This allows the PC staff maximum flexibility in assigning the volunteers.

VII. In the Africa Region (Senegal, Niger, Sierra Leone, Upper Volta, Ivory Coast, Togo, Dahomey, Cameroon) the term generalist is loosely used to mean anyone who is not specifically skilled or degreed in the requested area of expertise. Ag background and ABB skills are used rather interchangeably with the Ag background skill apparently preferred in both the LA and Africa regions. There appears to be a close similarity in the kinds of projects generalists are used in and a very definite distinction between generalists and specialists or degreed projects.

APPENDIX III

DATA SOURCES

C. Project Analysis

1. Issues

ISSUES

The three main issues of the study are "Are ABG's effective?" "How can ABG's be best used?"and "How great a need or demand for ABG suitable projects is foreseen for the next 5 and 10 years?" These issues are further defined and broken into smaller questions for the convenience of the interviewer. Each interviewer should attempt to elicit answers to as many of these questions as possible in each interview and in each country.

1. Are ABG's "effective" in agriculture projects. As effective as more skilled PCV's? Effectiveness is defined in terms of job performance, attainment of project, goals, language and communication ability, HC/PC relations on and off the job, etc.

2. Analysis of 104's reveals that generalists are currently being used at the grass roots level working directly with the farmers or villagers or at the end of delivery system with host country nationals, delivering a proven, needed terminology, usually with structured tasks. Are generalists best used in these kinds of projects? Are there other types of jobs generalists can do in agriculture?

3. The assumption has been made that generalists work best in broad based projects at the end of the delivery system delivering a proven technology. Do the Host Country National agencies (public or private) and governments want or have plans for these types of projects? What kinds of agriculture development do the countries prioritize? Do the Host Country personnel feel that experience or academic credentials are necessary for the PCV? What "features" do they value in a PCV? Will the Host Country agencies accept or be happy with a generalist sufficiently trained and supported by PC? At what levels or types of jobs and why?

4. One programming model for generalist projects involves using skilled PCV's to provide technical assistance or infrastructure support for the generalists working in the same project. How do the PC staff, Host Country personnel and the PCV's view this model? Does this indeed assist the generalist volunteer? Is this a viable job for the specialist? How do the specialists or degreed PCV's view this model? Is there an optimal skill mix or project size with this model or when using generalists in general?

5. Are the degreed and specialist PCV's in agriculture overqualified for their jobs? Are they being used as "cheap labor" by the host country or are they working in necessary, high priority jobs that are "suitable for Peace Corps?" Are the degreed and specialist volunteers "breaking ground" for generalists by working first in a new project and defining the necessary tasks before the generalists are brought to the country?

6. Has there been sufficient support for past and present generalist projects? Where and why has support succeeded or failed? Do the resources for supporting generalists exist in the Host Country?

7. Has there been sufficient training for past generalist projects? Where and why have training programs succeeded or failed. Do the resources exist in the Host Country for giving tasks? More complex tasks? Would some or all of the projects have been better served with a third country or US portion of the training program?

8. What are the key skills (communication ability, interpersonal skills, technical knowledge, analytical ability, educational level, experience) needed for different types of jobs (e.g. motivational, organizational, technical transfer, managerial or research) and different levels (e.g. grass roots, mid-level, etc.)?

APPENDIX III

DATA SOURCES

D. Questionnaire Analysis

OUTLINE

SYNOPSIS OF FINDINGS	1.
INTRODUCTION	2.
Purpose of the Questionnaire	2.
Sample	2.
Analytical Methodology	4.
ANALYSIS	5.
Effectiveness of Agriculture Sector Volunteers	5.
Generalist and Specialist Effectiveness	7.
Effectiveness Among Volunteers Working at the End of the Delivery System and Those Working within the Delivery System	9.
Effectiveness of Generalists and Specialists in Extension	10.
Programming and Training Factors	10.
First Source of Results and First Cause of Constraints	12.
Length of Service and Feelings of Effectiveness	14.
Job Characteristics and Perceived Effectiveness	14.
Sources of Support	17.
Quality of Support	19.
Training and Effectiveness	20.
Social Versus Technical Skills	23.
Need for a Volunteer Leader	23.
Tabulation Results, Agriculture Sector Volunteer Questionnaire	24.

LIST OF TABLES

TABLE A	Questionnaires Received from Each Country By September 18, 1975	3.
TABLE B	Responses for the Effectiveness Questions	6.
TABLE C	Perceived Effectiveness, Comparison of Generalist and Specialist Volunteers	8.
TABLE D	Perceived Effectiveness, Comparison of Extension and Development Volunteers	9.
TABLE E	Perceived Effectiveness, Comparison of Generalist and Specialist Volunteers in Extension	11.
TABLE F	Responses for the Programming and Training Questions	12.
TABLE G	First Source of Results	13.
TABLE H	First Cause of Constraints to Achieving Results	13.
TABLE I	Effect of Length of Service on Perceived Effectiveness	15.
TABLEJ	Effect of Job Definition on Perceived Work Related Effectiveness	16.
TABLE K	Effect of Job Appropriateness on Perceived Work Related Effectiveness	17.
TABLE L	First Source of Supervision and Assistance	18.
TABLE M	First Source of Supplies and Equipment	18.
TABLE N	Comparison of the First Source of Supervision and Assistance (#26) with the Quality of Supervision and Assistance Received (#29)	20.
TABLE O	Comparison of the First Source of Supplies and Equipment (#27) with the Adequacy of Supplies and Equipment Received (#30)	21.
TABLE P	Comparison of the Usefulness of Training with Perceived Work Effectiveness	22.
TABLE Q	Job Types and Social Versus Technical Skills	23.
TABLE R	Effect of Skill Level on the Need for a Volunteer Leader	23.

SYNOPSIS OF FINDINGS

- Agriculture volunteers indicate more effectiveness in fulfilling cross-cultural goals than work-related goals.
- There is no difference between generalists and specialists working in agriculture regarding perceived work effectiveness, but generalists indicate higher cross-cultural effectiveness.
- Volunteers at the end of the delivery system feel slightly more effective than those within the delivery system on both cross-cultural and work-related goals.
- There are no significant differences in perceived effectiveness between generalists and specialists in extension jobs although generalists indicate slightly higher cross-cultural interaction.
- Personal ability is perceived to be the first source of results and inadequate supplies and equipment the first constraint.
- Volunteers with longer service indicate higher effectiveness than do volunteers close to the start of service.
- Job definition (the tasks to be performed) affects job performance. That is, volunteers indicating a high degree of job definition also indicate high job performance.
- The appropriateness of the job affects job performance. That is, those volunteers indicating that their jobs are appropriate for a P.C.V. also indicate high job performance.
- Job structure (hours, lines of authority, etc.) and specificity of the target population do not affect job performance.
- The quality of the technical training definitely affects job performance, particularly in the first year of service.
- Generalists have a greater need for a volunteer leader than do specialists.
- Social skills are more important for the volunteers working in extension than those working other jobs.

Purpose of the Questionnaire

The Agriculture Questionnaire was developed by the evaluation staff at the end of phase one of the ABG in Agriculture Study to survey agriculture sector volunteer opinions of issues pertinent to the study. The questionnaire and the subsequent analysis attempted to determine (a) how the agriculture volunteers viewed their jobs and cross-cultural relationships, (b) if there were differences between volunteer groups in perceived effectiveness and (c) which programming, training and support factors influenced effectiveness.

Sample

The questionnaire was sent to 25 of the 63 Peace Corps countries on June 20, 1975. The main criteria for including a country in the sample was a large Peace Corps agriculture program where the majority of the agriculture volunteers were not working in individual placement or omnibus type programs. The countries chosen to be in the sample were the same chosen for inclusion in the phase one analysis.

Names of the volunteers in known agriculture projects in these countries were obtained from the desk officers' rosters and were then typed on individually addressed letters attached to the questionnaires. There was a total of 1178 questionnaires sent out: 873 individually addressed and 305 unaddressed. There were approximately 1300 agriculture and rural development sector volunteers on board as of June 30, 1975 (estimated from the June 30, 1975 Personnel Reports). The 873 known volunteers in the sample represents 67% of the total number of volunteers in this sector.

The questionnaires were sent to the country directors with instructions to distribute them to the appropriate volunteers. The volunteers were given the option of returning the questionnaires directly to Washington or through the in-country Peace Corps office. Questionnaires were accepted until September 18, 1975 at which time the analysis started.

By September 18th, 407 total and 385 usable questionnaires had been received. The response from each country is shown in Table A. The 385 questionnaires used in the analysis represent 30% of the estimated population of 1300 agriculture volunteers with the response being evenly distributed among the three regions. Thirty-two percent of the questionnaires were from the Africa Region (122 questionnaires), 35% were from the Latin America Region (143 questionnaires) and 31% were from the NANEAP Region (120 questionnaires).

TABLE A

QUESTIONNAIRES RECEIVED FROM EACH COUNTRY

BY SEPTEMBER 18, 1975

Country	# Questionnaires Received
Cameroon	29
Dahomey	11
Liberia	0
Mali	14
Niger	14
Senegal	18
Sierra Leone	24
Togo	3
Upper Volta	9
Africa Region	122
India	14
Iran	0*
Nepal	39
Phillippines	52
Tunisia	7
Morocco	8
NANEAP Region	120

Country	# Questionnaires Received
Brazil	28
Colombia	9
Costa Rica	27
Dominican Republic	15
El Salvador	24
Honduras	12
Guatemala	0
Nicaragua	10
Paraguay	15
Venezuela	3
Latin American Region	143

*Iran's questionnaires arrived too late to be included in the analysis.

It is difficult to calculate a response rate due to the lack of accurate information regarding how many agriculture sector volunteers were actually in the field when the questionnaire was administered. For the sake of a return rate it is estimated that there were an even 1,000 volunteers who could have returned the questionnaire, giving a response rate of 41%. If the three countries for which there was no response are not included in the calculation (a total of 150 questionnaires), the response rate becomes 407 out of 850 volunteers or 48%. These responses are considered good for a mailed questionnaire and indicate a high level of cooperation by both Peace Corps staff and volunteers. The motivation of the volunteers was also shown by the fact that they did a careful and complete job of filling out the questionnaires and wrote many comments.

Several factors prevented the rate of return from being higher. The first is that many of the agriculture volunteers are in rural areas. Secondly, the questionnaires were sent through Peace Corps offices, and some questionnaires had to be mailed up to four times. Third, the summer was the time for the rainy season and vacations for many of the volunteers in the Africa and NANEAP regions. Compounding these difficulties, the National Advisory Council questionnaires, and in many cases mid-service and close of service questionnaires, were administered simultaneously, not helping the rate of return for any of the questionnaires.

Analytical Methodology

As the questionnaires arrived in Peace Corps/Washington they were hand-coded and keypunched onto computer tape. The questionnaires were then analyzed using the computerized "Statistical Package for the Social Sciences" (SPSS). The types of analysis and the correlation and significance tests used are outlined below.

1. Marginals are often called raw frequencies and raw percentages. They indicate the number and percentage of respondents who answered each category of a question. They are used in this analysis to show how the volunteers responded to given questions and to compare percent positive responses for different questions.

2. Cross tabulation. Cross tabulation is a technique which tests the relationships between one question and another. It shows how volunteers responding to a category of a first question responded to each category of a second question. The majority of questions were accompanied by a 1 to 5 rating scale, 1 being very negative, 5 being very positive. For the majority of cross tabulations the five categories on the scale were divded into two groups, the more negative and "low" group and the more positive or "high" group. The groups were divided into the two categories as closely to the median as possible, an ideal division being 50% of the respondents in the "low" group and 50% in the "high" group.

For example, respondents who answered "low" on a first question and "high" on a second question are then compared with those answering "high" on both questions. On some divisions, such as "generalist" and "specialist," the respondents were divided into two groups on criteria other than above and below the median.

3. Correlation. The correlation coefficient is used to show the direction and degree of relationship between one question and another. The correlation coefficient used in this analysis is the Gamma statistic. The interpretation for the numerical value is .00 = no association, .01 to .09 = a negligible association, .10 to .29 = a low association, .30 to .49 = a moderate association, .50 to .69 = a substantial association, and .70 and higher = a very strong association, with Gamma taking values from -1 to +1. A minus sign does not change the degree of the relationship; it only refers to the direction of the correlation and will generally be explained in the text.

4. Significance. The significance test used is Chi square. This test indicates the probability that the difference between categories is due purely to chance (assuming a random sample). The smaller the significance, the greater the probability that differences are explainable by relationships and not chance. Probabilities greater than .05 are considered due to chance and "not significant."

ANALYSIS

Effectiveness of Agriculture Sector Volunteers

There are nine questions on the questionnaire that measure effectiveness, five cross-cultural measures and four work measures. The questions are listed below and each was accompanied by a 1 through 5 ranking scale where 1 is very negative, 2 is negative, 3 is neutral or average, 4 is positive and 5 is very positive:

Cross-cultural measures

#22, How would you describe your language ability?
#23A, How would you rate your interpersonal relationships with host nationals on the job?
#23B, How would you rate your interpersonal relationships with host nationals off the job?
#35, Rate your experience in fulfilling the Second Goal of Peace Corps, that is promoting a better understanding of Americans on the part of the people served.
#36, Rate your experience in fulfilling the Third Goal of Peace Corps, that is, promoting a better understanding of other people on the part of Americans.

Work measures

#16, How competent do you feel you are in performing your job?
#17, Are you transferring your skills to host nationals (counterparts, target population), i.e. are they learning to do your job or acquiring your skills?
#19, How do you rate your job performance?
#34, Rate your experience in fulfilling the First Goal of Peace Corps, that is, meeting the needs for trained manpower?

TABLE B

RESPONSES FOR THE EFFECTIVENESS QUESTIONS

Question Description	Type of Effectiveness	Percent Postive or Very Positive	Rank
Relations with HCN's on the job	Cross-cultural	78%	1
Fulfilling Goal 3	Cross-cultural	70%	2
Job Competence	Work	68%	3
Relations with HCN's off the job	Cross-cultural	68%	3
Fulfilling Goal 2	Cross-cultural	60%	5
Job Performance	Work	58%	6
Fulfilling Goal 1	Work	54%	7
Language Fluency	Cross-cultural	35%	8
Skill Transference	Work	35%	9

The percent positive and very positive responses (responses 4 and 5) are shown in Table B. The highest ranking question among the percent positive responses is relations with HCN's on the job (78%) followed by experiences fulfilling Goal 3 (70%), while the two lowest ranking variables are skill transference (35% positive) and language fluency (36% positive). Better than 50% of the volunteers answered either positive or very positive on 7 of the 9 questions with respondents indicating better than 70% positive responses on only 1 question.

Four of the five highest ranking questions are cross-cultural questions while 3 of the 4 lowest are work-related questions. This indicates that, in general, the agriculture volunteers answering the questionnaire feel more effective in cross-cultural areas than they do at their jobs.

Generalist and Specialist Effectiveness

One of the primary issues of the study is whether generalist volunteers are as effective as specialist volunteers in agricultural jobs. Whereas this questionnaire does not actually measure effectiveness, it does measure how effective the volunteers perceive themselves to be. The volunteers in the sample were divided into "generalists" or those with humanities and social science educations and "specialists," or those trained in agriculture, business, or science. These two groups were compared on their responses on each of the nine effectiveness measures with the results being displayed in Table C.

Table C shows that there are no significant differences between generalists and specialists on how they view their work effectiveness and on 3 of the 5 cross-cultural measures. However, generalists do view themselves to be more fluent in foreign languages than specialists (47% high fluency to 22%) and having better relations with HCN's on the job (38% to 28%). While the differences between generalists and specialists do not approach statistical signficance on three of the cross-cultural measures, it is worth noting that the generalists rank higher than the specialists on all 5 of these measures.

TABLE C

PERCEIVED EFFECTIVENESS
COMPARISON OF GENERALIST AND SPECIALIST VOLUNTEERS

Variable	Generalist (130)[1]	Specialist (225)[1]	Correlation[2]	Significance[3]
Work Effectiveness				
% feeling competent in their jobs (Q16, responses 4,5)	65%	70%	.10	None
% indicating high job performance (Q19, R 4,5)	61%	57%	-.09	None
% feeling high fulfillment of Goal 1 (Q34, R 4,5)	52%	56%	.09	None
% feeling high skill transference (Q17, R 4,5)	39%	34%	-.11	None
Cross-Cultural Effectiveness				
% indicating high language fluency (Q22, R 4,5)	47%	22%	-.29	.01
% indicating very high relations with HCN's on the job (Q23A, R 5)	38%	28%	-.23	.05
% indicating very high relations with HCN's off the job (Q23B, R 5)	38%	30%	-.19	None
% indicating high fulfillment of Goal 2 (Q35, R 4,5)	65%	58%	-.16	None
% indicating high fulfillment of Goal 3 (Q36, R 5)	34%	31%	-.07	None

1. Figure inside parenthesis indicates number of volunteers in this category.
2. Indicates the Gamma Correlation Coefficient; interpretation of this statistic described on page four.
3. Chi square test for statistical significance. The level of significance used is .05. That is, significances larger than .05 indicate that the difference between Generalist and Specialist answers are due to chance and "not significant."

Effectiveness Among Volunteers Working at the End of the Delivery System and Those Working within the Delivery System

Another issue of the study is whether volunteers at the end of the delivery system are as or more effective than volunteers within the delivery system. Respondents were divided into those working in extension, assumed to be at the end of the delivery system and those working in developmental jobs, assumed to be within the delivery system. The responses of these two groups were compared on each on the 9 effectiveness measures, the results being shown in Table D.

TABLE D

PERCEIVED EFFECTIVENESS
COMPARISON OF EXTENSION AND DEVELOPMENT VOLUNTEERS

Variable	Extension Jobs (192)	Development Jobs (159)	Correlation	Significance
Work Effectiveness				
% feeling competent in their jobs (Q16, R4,5)	68%	70%	.05	None
% indicating high job performance Q19, R4,5)	57%	59%	.04	None
% feeling high fulfillment of Goal 1 (Q34, R4,5)	59%	47%	-.23	.04
% feeling high skill transference (Q17, R4,5)	40%	29%	-.24	.04
Cross-Cultural Effectiveness				
% indicating high language fluency (Q22, R4,5)	37%	35%	-.04	None
% indicating very high relations with HCN's on the job (Q23A, R,5)	31%	31%	-.01	None
% indicating very high relations with HCN's off the job (Q23B, R5)	34%	32%	-.03	None
% indicating high fulfillment of Goal 2	64%	60%	-.05	None
% indicating high fulfillment of Goal 3 (Q36, R5)	38%	26%	-.25	.04

Table D shows that those in extension jobs rate themselves as slightly more effective than those in developmental on three of the measures and that there are no significant differences on the rest of the measures. The extensionists rate themselves higher on fulfilling Goal 1 (59% to 47%), skill transference (40% to 29%) and fulfilling Goal 3 (38% to 26%). However, it should be noted that the correlations are slight and the differences are just barely significant.

Effectiveness of Generalists and Specialists in Extension

It is possible that differences between specialist and generalist feelings of effectiveness are attributable to the fact that 70% of the generalists in the sample work in extension while the specialists are almost equally divided between extension and developmental jobs. Therefore feelings of effectiveness were compared between generalists and specialists in extension jobs. The results are shown in Table E.

Table E shows that there are no significant differences of perceived effectiveness between generalist and specialist volunteers working in extension on any of the measures. However, it is worth noting that generalists scored higher than the specialists on all five of the cross-cultural variables although the differences do not approach statistical significance.

Programming and Training Factors

The questionnaire contains 6 questions that rate current programming:

#13, How structured do you feel your present job is? (Structured here defined as a job with regular working hours and clear lines of authority, supervision and reporting procedures.)
#14, How specific is the target population who benefits from your services? (Vague -- all farmers in country, to precise -- 50 rice farmers in ABC province.)
#15, How well defined is your job? That is, the tasks you are expected to perform.
#18, Is your job appropriate for a P.C. volunteer (responds to Host Country need for trained manpower)?
#24, How necessary is technical training for your job?
#28, How useful has the agricultural or job-related training been which you have received?

TABLE E

PERCEIVED EFFECTIVENESS, COMPARISON OF GENERALIST AND SPECIALIST VOLUNTEERS IN EXTENSION

Variable	Generalist (88)	Specialist (102)	Correlation	Significance
Work Effectiveness				
% feeling competent in their jobs (Q16, R4,5)	61%	71%	.20	None
% indicating high job performance (Q19, R4,5)	56%	58%	.05	None
% feeling high fulfillment of Goal 1 (Q34, R4,5)	58%	61%	.06	None
% feeling high skill transference (Q17, R4,5)	43%	39%	-.08	None
Cross-Cultural Effectiveness				
% indicating high language fluency (Q22,R4,5)	45%	32%	-.26	None
% indicating very high relations with HCN's on the job (Q23A, R5)	36%	28%	-.17	None
% indicating very high relations with HCN's off the job (Q23B, R5)	41%	28%	-.29	None
% indicating high fulfillment of Goal 2 (Q35, R4,5)	63%	61%	-.03	None
% indicating high fulfillment of Goal 3 (Q36, R,5)	38%	37%	-.03	None

For each question the volunteers were given a 1 to 5 scale, 1 being a very negative response and 5 being a very positive response. A ranking of the percent positive and very positive responses (responses 4 and 5) for these questions is shown in Table F.

TABLE F

RESPONSES FOR THE PROGRAMMING AND TRAINING QUESTIONS

Question Description	% Postive or Very Positive	Rank
Job appropriateness	73%	1
Necessity of technical training	71%	2
How well defined is present job	47%	3
How specific is target population	46%	4
Usefulness of technical training	45%	5
Job structure	30%	6

Table F indicates that the agriculture sector volunteers sampled generally felt negative about the programming of their jobs. Only job appropriateness (73% positive) and the necessity of technical training (71% positive) received more than 50% response. Job structure (30% positive) ranked lowest. Seventy-one percent of the respondents said that technical training was necessary, but only 45% indicated that the technical training they received was useful. Similarly, 73% of the respondents felt that their jobs were appropriate or most appropriate, but fewer than 50% felt that their jobs well defined, well structured or that the target population was specific.

First Source of Results and First Cause of Constraints

Table G displays the results for generalists, specialists and the entire population of respondents for question #20, "number in order of priority three of the statements below which you feel have contributed to achieving results." Table H displays, for the same subpopulations, the results of question #21, "number in order of priority three of the statements below which have been constraints to achieving results." For both tables only the first choice or the most important factor has been displayed.

TABLE G

FIRST SOURCE OF RESULTS

Source	Generalist (124)	Specialist (223)	All (347)
Well defined job and project	22%	15%	17%
Peace Corps training	17%	22%	21%
Peace Corps staff support	2%	2%	2%
Personal ability	42%	41%	41%
Other	18%	19%	19%

Significance Test: There are no significant differences between generalist and specialist responses.

TABLE H

FIRST CAUSE OF CONSTRAINTS TO ACHIEVING RESULTS

Cause	Generalist (124)	Specialist (223)	All (349)
Poorly defined job	8%	9%	9%
Ineffective technical assistance	10%	8%	9%
Inadequate supplies and equipment	30%	26%	28%
Lack of supervision	3%	5%	4%
Inexperience	14%	8%	10%
Environment, culture, or physical condition	19%	23%	22%
Other	15%	21%	19%

Significance Test: There are no significant differences between generalist and specialist responses.

Table G shows that "personal ability" is considered by 41% of the volunteers to be the most important factors leading to results, compared to 21% for Peace Corps training, 19% for other, 17% for well defined job and project and 2% for Peace Corps staff support. There are no significant differences between generalist and specialist responses.

Table H shows feelings about the causes of constraints are more equally divided among several factors. Inadequate supplies and equipment received the most responses with 28%, followed by environment, culture or physical condition with 22%, other 19%, and inexperience 10%. The other three responses received less than 10% of the total responses each. As in Table G, Table H shows that there are no significant differences between generalist and specialist responses.

Length of Service and Feelings of Effectiveness

It was expected that length of service would affect volunteer feelings of effectiveness. The respondents were divided into two groups, less than one year of service and one year or more served. Responses to the effectiveness measures were then compared for each group, the results being shown in Table I.

Table I indicates that length of service strongly affects feelings of job competency (77% positive responses for second year volunteers and extendees versus 58% for first year volunteers), language fluency (45% versus 27%), relations with HCN's off the job (40% versus 25%), and to a lesser degree, job performance (64% versus 51%). The second year and extended volunteers answered higher than first year volunteers on all nine of the measures although the differences were statistically significant on only four of the measures.

Job Characteristics and Perceived Effectiveness

In an attempt to discover which, if any, job characteristics affect perceived effectiveness, responses to four programming questions where compared to responses on the four work-related effectiveness questions. The programming questions used were #13, job structure, (regular working hours, clear lines of authority, supervision and reporting procedures); #14, job specificity (specificity of target population); #15, job definition (definition of tasks);

TABLE I

EFFECT OF LENGTH OF SERVICE
ON PERCEIVED EFFECTIVENESS

Variable	Less than 1 year	1 year or more	Correlation	Significance
Work Effectiveness				
% feeling competent in their jobs (Q16, R4,5)	58%	77%	.41	.0002
% indicating high job performance (Q19, R4,5)	51%	64%	.26	.02
% feeling high fulfillment of Goal 1 (Q34, R4,5)	49%	58%	.18%	None
% feeling high skill transference (Q17, R4,5)	31%	38%	.15	None
Cross-Cultural Effectiveness				
% indicating high language fluency (Q22, R4,5)	27%	45%	.39	.0003
% indicating very high relations with HCN's on the job (Q23A, R5)	27%	35%	.20	None
% indicating very high relations with HCN's off the job (Q23B, R5)	25%	40%	.32	.005
% indicating high fulfillment of Goal 2 (Q35, R4,5)	58%	63%	.11	None
% indicating high fulfillment of Goal 3 (Q36, R5)	29%	36%	.15	None

and #18, job appropriateness for a P.C.V. (job responding to host country needs for trained manpower). The results for the last two questions are displayed in Tables J and K.

It was found that job structure and job specificity had no effect on feelings of job performance. There were no significant differences on the effectiveness questions between volunteers who indicated low or high job structure or between volunteers who indicated low or high job specificity.

However, Table J shows that there are significant differences between respondents indicating "high" job definition (responses 4 and 5) and those indicating "low" job definition for all five effectiveness variables compared. The greatest differences between volunteers with well defined jobs and volunteers with less-well defined jobs occur on the comparison with #16, job competency (79% to 59%) and #19 job performance (71% to 46%). However, from Table F it is seen that only 47% of the respondent's rated their jobs as well defined or very well defined.

It is interesting to note that while job definition is a key variable affecting feelings of performance and effectiveness, the volunteers in the sample do not perceive it as terribly important. This fact is indicated on Tables G and H where only 17% of the respondents named "well defined job and project" as the first source of results and only 9% named "poorly defined job" as the first constraint to achieving results.

TABLE J

EFFECT OF JOB DEFINITION ON PERCEIVED WORK RELATED EFFECTIVENESS

Effectiveness Question	Poorly defined job (193)	Well defined job response (172)	Correlation	Significance
% feeling competent in their jobs	59%	79%	.44	.0001
% indicating high job performance	46%	71%	.48	.0001
% indicating high fulfillment of Goal 1	47%	60%	.25	.02
% feeling high skill transference	29%	41%	.25	.02
% feeling high relations with HCN's on the job	26%	37%	.24	.04

Table K shows that Feelings of Job Appropriateness affects Feelings of Work Effectiveness. Those who feel that their jobs are most appropriate also feel much more competent in their jobs (83% to 58%), feel they have higher job performance (74% to 45%), feel they fulfill Goal 1 better (70% to 41%) and feel that they have higher skill transference (46% to 27%) than those who feel that their jobs are less appropriate. These differences are significantly large and the correlations strong, indicating that feelings of job appropriateness is an important factor influencing feelings of job effectiveness.

However, isolating which groups of volunteers feel that their jobs are most appropriate is a more difficult process. No significant differences could be found between the following subpopulations on feelings of job appropriateness: generalist and specialist; prior agriculture experience and no prior agriculture experience; extension and developmental jobs; less than one year and more than one year length of service, and the three Regions.

TABLE K

EFFECT OF JOB APPROPRIATENESS ON PERCEIVED WORK RELATED EFFECTIVENESS

Effectiveness Question	"Low" appropriate job (R 1 - 4) (205)	"High" appropriate job (R5) (167)	Correlation	Significance
% feeling competent in their jobs	58%	83%	.55	.0001
% indicating high job performance	45%	74%	.54	.0001
% indicating high fulfillment of Goal 1	41%	70%	.55	.0001
% feeling high skill transference	27%	46%	.38	.0004

Sources of Support

Table L displays differences among generalists and specialists and the total population of respondents for question 26, "Number in order of priority three of the following sources from which you are receiving supervision and/or assistance." Table M shows differences for question 27, "Number in order of priority three of the following sources of supplies and equipment from which you are receiving assistance." For both tables only the first choice or the most important factor has been displayed.

TABLE L

FIRST SOURCE OF SUPERVISION AND ASSISTANCE

Source	Among Generalists (130)	Among Specialists (219)	Among All Respondents (349)
Peace Corps Staff	14%	11%	12%
Host Country Personnel	39%	47%	45%
Volunteer Leader	9%	4%	5%
Other Volunteers	18%	21%	20%
International Develoment Organization	11%	6%	8%
Other	9%	11%	10%

Significance Test: There are no significant differences between generalist and specialist responses.

TABLE M

FIRST SOURCE OF SUPPLIES AND EQUIPMENT

Source	Among Generalists (125)	Among Specialists (216)	Among All Respondents (341)
Host Country Agency	25%	51%	41%
Peace Corps Direct Funds	29%	20%	23%
Peace Corps Indirect Funds	2%	2%	2%
International Aid Organization	34%	13%	20%
Friends in the U.S.	2%	1%	2%
Other	10%	13%	12%

Significance Test: There are significant differences between generalist and specialist responses.

In Table L over 45% of all the respondents listed the Host Country personnel as the first source of supervision and/or assistance followedy by other volunteers (20%), Peace Corps staff (12%), international development organization (8%) and volunteer leader (5%). There are slight but not significant differences between generalist and specialist responses.

Table M shows that among all respondents the Host Country agency is the first source of supplies and equipment (41%), Peace Corps direct funds second (23%), international aid organization third (20%), other fourth (12%) and Peace Corps indirect funds and friends in the U.S. fifth with only 2%. In this table there are some significant differences between generalist and specialist responses. The most significant differences are that specialists indicate a higher reliance on the host country agency than generalists for material (51% to 25%) and generalists indicate a higher reliance on international aid organizations than do specialists (34% to 13%).

Quality of Support

There are two questions that measure the quality of support received:

#29, "How would you qualify the supervision and assistance which you have received?"

#30, "How adequate have supplies and equipment been?"

For both questions there was a 5 point rating scale, 1 being unsatisfactory, 3 being average and 5 being excellent.

Table N shows how the respondents rated their first source of supervision and assistance. The table shows that 59% of all the respondents rated their supervision and assistance as average or above average. Among those naming Peace Corps staff as the first source, 66% rated the supervision and assistance as satisfactory and for those naming the Host Country personnel as the first source, 65% indicated satisfactory supervision and assistance. It is interesting to note that these ratings are virtually the same. However, among those naming other volunteers as the first source, only 43% responded positively.

TABLE N

COMPARISON OF THE FIRST SOURCE OF SUPERVISION AND ASSISTANCE (#26) WITH THE QUALITY OF SUPERVISION AND ASSISTANCE RECEIVED (#29)

First Source of Supervision and Assistance	Unsatisfactory Supervision and Assistance (R 1 & 2)	Satisfactory Supervision and Assistance (R 3,4,5)
PC staff (44)	34%	66%
Host Country personnel (153)	35%	65%
Volunteer leader (20)*	(40%)	(60%)
Other volunteers (70)	57%	43%
International Aid (27)*	(41%)	(59%)
Other (36)	47%	53%
All respondents (350)	41%	59%

*Indicates a small sample and therefore unreliable results.

Significance Test = .05, indicating that some of the larger differences between ratings of sources are just barely significant.

Table O displays how the respondents rated the first source of supplies and equipment. Fifty-three percent of all the respondents rated their supplies and equipment as being average or above, that is, satisfactory. A comparison of the different sources of supplies and equipment reveals that there are no significant differences between how the respondents rated each source. As in Table L, the respondents again rated the Host Country agency and Peace Corps direct funds equally when it is the first source of supplies and equipment.

Training and Effectiveness

Question #28 asks, "How useful has the agricultural or job related training been which you have received?" The volunteers were given a five point rating scale, 1 being unsatisfactory, 3 being average and 5 being excellent. Respondents to this question were divided into two groups, those indicating a lower usefulness of technical training (responses 1,2 and 3) and those indicating a high usefulness of technical training (responses 4 and 5), and these groups were then compared on their responses to the four work measures.

TABLE O

COMPARISON OF THE FIRST SOURCE OF SUPPLIES AND EQUIPMENT (#27) WITH THE ADEQUACY OF SUPPLIES AND EQUIPMENT RECEIVED (#30)

First Source of Supplies and Equipment	Unsatisfactory (R 1 & 2)	Satisfactory (R 3,4,5)
Host Country Agency (145)	44%	56%
Peace Corps Direct Funds (80)	44%	56%
Peace Corps Indirect Funds (6)*	NA*	NA*
International Aid Organization (70)	49%	51%
Friends in the U.S. (6)*	NA*	NA*
Other (43)	60%	40%
All Respondents (350)	47%	53%

*Indicates a very small sample and very unreliable results.

Significance Test: Not significant. The differences between how sources are rated are not statistically significant.

Table P shows that for first year volunteers there are very significant differences between those indicating high usefulness and those indicating a low training on three of the four work-related effectiveness measures. Those feeling that training was useful also felt more competent (69% high competency to 48%), felt they had better job performance (64% high to 37%) and much higher skill transference (48% high transference to 19%) than did those indicating a low training usefulness. The same trend is also seen for volunteers who have served one year or longer, although the differences between categories do not reach statistical significance.

Thus, it appears that technical training is a very important factor affecting performance and competency during the first year of service.

TABLE P

COMPARISON OF THE USEFULNESS OF TRAINING WITH PERCEIVED WORK EFFECTIVENESS

For First Year Volunteers:

Effectiveness Question	Low Technical Training Usefulness (82)(R1-3)	High Technical Training Usefulness (83)(R4,5)	Correlation	Signficance
% feeling competent in their jobs	48%	69%	.42	.008
% indicating high job performance	37%	64%	.51	.0008
% indicating high fulfillment of Goal 1	45%	54%	.31	None
% feeling high skill transference	19%	48%	.59	.0002

For Second Year Volunteers and Extendees:

Effectiveness Question	Low Technical Training Usefulness (112)	High Technical Training Usefulness (80)	Correlation	Significance
% feeling competent in their jobs	73%	82%	.29	None
% indicating high job performance	58%	73%	.31	None
% indicating high fulfillment of Goal 1	53%	65%	.27	None
% feeling high skill transference	38%	40%	.05	None

Social Versus Technical Skills

Question #12 asked the respondents to list the job skills needed for their job. Responses were divided into two categories: those listing only technical skills (61%) and those indicating that social skills were needed (39%). Responses to this question were then compared between job categories with the results shown in Table Q. This table indicates that extension workers regard social skills to be more important to their job (47%) than do those volunteers in development jobs (29%).

TABLE Q

JOB TYPES AND SOCIAL VERSUS TECHNICAL SKILLS

Type of Job	Indicating Social Skills (139)	Indicating Technical Skills (214)	Correlation	Significance
Extension	47%	53%	.37	.0008
Development	29%	71%		

Need for a Volunteer Leader

Question #32 asks if a volunteer leader would be helpful to the volunteer's work. Fifty percent of all respondents answered "no." However, generalists find a greater need for a volunteer leader than do specialists. Table R shows that 61% of the generalists said that a volunteer leader would be helpful versus 44% of the specialists.

TABLE R

EFFECT OF SKILL LEVEL ON THE NEED FOR A VOLUNTEER LEADER

Skill	No Need for a Volunteer Leader (162)	Need for a Volunteer Leader (166)	Correlation	Significance
Generalist	39%	61%	-.32	.005
Specialist	56%	44%		

TABULATION RESULTS

AGRICULTURE SECTOR VOLUNTEER QUESTIONNAIRE

Total Respondents (N) = 385

1. Average Age: 25.4 years N = 384

2. Sex: Male 95% Female 5% N = 385

3. Marital Status: Single 83% Married 17% N = 383

4. Education:

Degree		Level of Education	
Ag Related	= 48%	Less than B.A.	= 12%
Business, Science	= 16%	B.A.	= 79%
Humanities or Social Science	= 36%	M.A. or more	= 9%
	N=362		N = 383

5. Description and length of time engaged in agricultural work prior to P.C. service

Summers or equivalent	= 24%
Grew up on a farm	= 23%
No experience	= 34%
Limited professional exp.	= 14%
Professional experience	= 6%

N = 354

6. Training Site(s):

All In-Country	= 71%
All Third Country	= 10%
Combination of above	= 9%
Other	= 10%

N = 362

7. Weeks of training at sites

0 - 6 weeks	8%	12 weeks	37%
7 - 8 weeks	6%	13 weeks	8%
9 weeks	2%	14 weeks	7%
10 weeks	15%	15+weeks	8%
11 weeks	9%		

N = 371

8. Months of P.C. service

1-6 months = 11%
7-12 months = 36%
13-18 months = 16%
18-24 months = 25%
25+ months = 12%

N = 385

9. Work location

Rural = 77%
Urban = 16%
Combination = 7%

10. Job Title

Extension = 36%
Administration = 7%
Field production and research = 25%
Extension with field production or research = 19%
Advisory Personnel = 9%
Planning = 3%
Pure research = 3%

N = 362

11. N.A.

12. Job Skills

Technical skills = 61%
Interpersonal skills = 8%
Technical and interpersonal skills = 30%

N = 374

13. How structured do you feel your present job is? (Structured here defined as a job with regular working hours and clear line of authority, supervision and reporting procedures.)

little				very	
1	2	3	4	5	
29%	22%	18%	19%	11%	N = 382

14. How specific is the target population who benefits from your services? (Vague - all farmers in country, to precise - 50 rice farmers in ABC province)

vague				precise
1	2	3	4	5
19%	14%	20%	28%	19%

15.How well defined is your job, i.e. the tasks you are expected to perform?

vague				precise	
1	2	3	4	5	
14%	19%	20%	28%	19%	N=378

16.How competent do you feel you are in performing your job?

barely				very	
1	2	3	4	5	
2%	5%	24%	43%	25%	N=378

17.Are you transferring your skills to host nationals? (Counterparts, target populations), i.e. are they learning to do your job or acquiring your skills?

no		somewhat		yes	
1	2	3	4	5	
16%	11%	36%	18%	16%	N=373

18.Is your job appropriate for a P.C. Volunteer (responds to Host Country need for trained manpower)?

inappropriate				most appropriate	
1	2	3	4	5	
7%	8%	12%	28%	44%	N=382

19.How do you rate your job performance?

poor		average		excellent	
1	2	3	4	5	
2%	5%	34%	42%	14%	N=372

20.Indicate in order of priority three of the statements below which you feel have contributed to achieving results.

	First	Second	Third
Well-defined job and project	17%	15%	22%
Peace Corps training	20%	21%	24%
Peace Corps staff support	2%	10%	22%
My personal ability	42%	33%	17%
Other	19%	22%	15%
	N=372	N=365	N=324

21. Indicate in order of priority three of the statements below which have been constraints to achieving results.

	First	Second	Third
Poorly defined job	9%	8%	12%
Ineffective technical assistance	9%	18%	17%
Inadequate supplies and equipment	28%	22%	11%
Lack of supervision	4%	8%	11%
My inexperience	11%	12%	20%
Environment, culture, or physical condition	21%	16%	16%
Other	19%	15%	13%
	N=366	N=343	N=307

22. How would you describe your language ability?

poor 1	2	3	4	fluent 5	
4%	12%	47%	25%	12%	N = 378

English used, .3%.

23. How would you rate your interpersonal relationships with host nationals?

	poor 1	2	3	4	excellent 5	
On the job	1%	4%	18%	46%	31%	N=376
Outside the job	1%	6%	24%	36%	33%	N=375

24. How necessary is technical training for your job?

not 1	2	3	4	very 5	
4%	8%	16%	26%	45%	N=373

25. Indicate in order of priority three of the following kinds of continued technical training which would be helpful to you.

	First	Second	Third
Formal courses	8%	10%	13%
Conferences or workshops	26%	26%	21%
On-the-job training	26%	19%	14%
Visits by technicians	18%	23%	18%
Study	8%	15%	25%
Not needed	7%	3%	4%
Other	6%	4%	6%
	N=365	N=325	N=296

26. Indicate in order of priority three of the following sources from which you are receiving supervision and/or assistance.

	First	Second	Third
Peace Corps staff	12%	27%	30%
Host country agency personnel	45%	25%	18%
volunteer leader	5%	5%	6%
Other volunteers	20%	25%	24%
International development organization personnel	8%	11%	14%
Other	10%	6%	9%
	N=367	N=334	N=280

27. Indicate in order of priority three of the following sources of supplies and equipment from which you are receiving assistance.

	First	Second	Third
Host country agency	41%	36%	20%
Peace Corps (direct), i.e. country budget	23%	28%	24%
Peace Corps (indirect), i.e. school partnership program	2%	2%	5%
International development oganization personnel	20%	15%	13%
Friends in the U.S.	2%	5%	16%
Other	12%	1%	23%
	N=360	N=279	N=173

28. How useful has the agricultural or job-related training been which you have received?

unsatisfactory		average		excellent	
1	2	3	4	5	
14%	18%	23%	28%	18%	N=365

29. How would you qualify the supervision and assistance which you have received?

unsatisfactory		average		excellent	
1	2	3	4	5	
15%	27%	36%	16%	6%	N=364

30. How adequate have supplies and equipment been?

unsatisfactory		average		excellent	
1	2	3	4	5	
22%	26%	32%	13%	6%	N=368

31. Would it be advantageous to your project to have a highly specialized volunteer as a team member?

no		somewhat		most	
1	2	3	4	5	
29%	12%	18%	16%	24%	N=370

32. Would a volunteer leader be helpful to you in your work?

no		somewhat		most	
1	2	3	4	5	
50%	11%	20%	12%	8%	N=345

33. Indicate in order of priority the three goals of Peace Corps as you value them.

	First	Second	Third
Meeting the needs for trained manpower	57%	23%	21%
Promoting a better understanding of the American people on the part of the people served	17%	44%	37%
Promoting a better understanding of other people on the part of the American people	26%	34%	42%
	N=367	N=348	N=342

34. Meeting the needs for trained manpower.

poor				excellent	
1	2	3	4	5	
5%	10%	32%	37%	16%	N=372

35. Promoting a better understanding of Americans on the part of the people served.

poor				excellent	
1	2	3	4	5	
4%	7%	29%	39%	22%	N=370

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36.Promoting a better understanding of other people on the part of Americans.

poor				excellent	
1	2	3	4	5	
4%	3%	23%	38%	32%	N=367

37. N.A.

38. N.A.

39.AB Generalists, i.e. graduates with liberal arts degrees when trained to do specific jobs can perform effectively in agricultural projects. Do you agree or disagree with this statement?

85% agree 15% disagree N=342

40. N.A.